COMMUNITY DEVELOPMENT PERMIT CENTER



GROUNDING ELECTRODES (E11)

2013 CA ELECTRICAL CODE 250-50 & 250-52

A metal underground gas piping system shall not be used as a grounding electrode. Gounding Electrode System If available on the premises at each building or structure served, a metal underground water pipe in direct contact with the earth for 10 feet or more and electrically continuous (or made electrically continuous by bonding around insulating joints or sections) to the points of connection of the grounding electrode conductor and the bonding conductors. A Metal-frame building metal underground water pipe shall be supplemented by an additional electrode, within 5 ft of point of entrance of pipe such as a driven rod. Interior metal water piping located more than 5 feet from the point of entrance to the building shall not be used as a conductor to interconnect the electrodes and the grounding electrode Concrete-encased electrode conductor. Ground ring Metal underground water pipe A grounding electrode system Clamps suitable for direct burial or exothermic weld Not less 8 ft than 6 ft Grounding electrode A concrete-encased Bolted-type connection device electrode or exothermic weld Nonmetallic Grounding protective electrode sleeve Concrete foundation No. 4 AWG or larger bare copper conductor or steel reinforcing bar or rod not less than 1/2" diameter 2 in Direct contact minimum 20 ft. minimum with earth